

Application No. 10/007,061  
Amendment dated December 15, 2005  
Reply to Office Action of June 15, 2005

Docket No.: BVTP-P03-007

### REMARKS

#### Claim Amendments

Claims 1 and 15 have been amended to recite that the charge comprises at least two discrete materials capable of providing a multi-stage reaction. Support for this amendment can be found throughout the specification, for example, at page 28, lines 13-15. Claims 15 and 18 have also been amended to further clarify the claimed invention. New claims 19-21 have been added. Support for these claims can be found throughout the specification, for example, at page 26, lines 21-25. No new matter has been added.

#### Rejection of Claim 15 Under 35 U.S.C. §112, Second Paragraph

Claim 15 has been rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite. Claim 15 has been amended to even more particularly point out and distinctly claim that which Applicants regard as the invention. Reconsideration and withdrawal of the rejection are respectfully requested.

#### Rejection of Claim 15 Under 35 U.S.C. §101

Claim 15 has been rejected under 35 U.S.C. §101 as allegedly being an improper process claim. Claim 15 has been amended to obviate this rejection. Reconsideration and withdrawal of the rejection are respectfully requested.

#### Rejection of Claims 1-9 and 11-13 Under 35 U.S.C. §103(a)

Claims 1-9 and 11-13 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,270,473 ("Schwebel") in view of U.S. Patent No. 6,830,560 ("Gross"). The Examiner states that Schwebel teaches a needleless injection device integrally formed comprising an injector having a first cavity and an orifice, a movable member in the first cavity, and a charge in a housing having a second cavity. The Examiner further states that Schwebel does not teach the charge being comprised of having at least two layers. The Examiner states that Gross teaches a gas generator using a charge of two materials used in an automatic syringe, wherein the materials (citric acid and sodium bicarbonate) have different combustion

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characteristics. The Examiner states that it would have been obvious to one skilled in the art at the time the invention was made to have substituted the charge of Schwebel with the charge of Gross in order to provide a charge in a needleless injector that is made of non-lethal chemical components.

Applicants respectfully traverse the rejection. Although the discussion below focuses on the deficiencies in the charge as disclosed by Gross, this should not be construed as agreement with the Examiner's view of the disclosure of Schwebel or other portions of the disclosure of Gross.

Claim 1 and claims dependent thereon have been amended to recite that the charge comprises at least two discrete materials capable of providing a multi-stage reaction. The charge disclosed by Gross does not meet the limitations of the claims as amended. Specifically, the charge of Gross is "an effervescent couple" (col. 4, lines 63-64) which generates a volume of gas. This charge is not a charge which comprises two discrete materials capable of providing a multi-stage reaction. Instead, the combination of the effervescent couple (e.g., citric acid and sodium bicarbonate) produces a single stage reaction, i.e., the immediate release of carbon dioxide (col. 7, lines 36-40). Accordingly, even combination of Schwebel and Gross does not teach or suggest all of the elements of the claimed invention, as amended. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection of Claims 15-18 Under 35 U.S.C. §103(a)

Claims 15-18 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,270,473 ("Schwebel") in view of U.S. Patent No. 5,421,264 ("Petrick"). The Examiner states that Schwebel does not disclose the use of a two-layer charge. The Examiner further states that the embodiment disclosed in figure 13 of Petrick teaches a layered charge for having a predetermined result having two discrete materials. The Examiner concludes that it would have been obvious to one skilled in the art at the time the invention was made to have substituted the charge of Schwebel with the charge of Petrick in order to provide a charge in a needleless injector with a desired pressure-rated result.

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Docket No.: BVTP-P03-007

Applicants respectfully traverse the rejection. Although the discussion below focuses on the deficiencies in the charge as disclosed by Petrick, this should not be construed as agreement with the Examiner's view of the disclosure of Schwebel or other portions of the disclosure of Petrick.

Claim 15 and claims dependent thereon have been amended to recite that the charge comprises at least two discrete materials capable of providing a multi-stage reaction. The charge disclosed by Petrick does not meet the limitations of the claims as amended, as it is not capable of producing a multi-stage reaction. Reconsideration and withdrawal of the rejection are respectfully requested.

### CONCLUSION

In view of the above amendments and remarks, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this response other than those submitted herewith. However, if a fee is due, please charge our Deposit Account No. 18-1945 from which the undersigned is authorized to draw under Order No. BVTP-P03-007.

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Respectfully submitted,

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